

MEMORANDUM

To: City of Bloomington Common Council

From: Mallory Rickbeil, Bicycle and Pedestrian Coordinator, Planning and Transportation Department

Date: September 29, 2020

Re: Updated NTSP Policy Framework

This memo provides a background on the current Neighborhood Traffic Safety Program (NTSP) (generally referred to as the Traffic-Calming Policy), and it explains a new program—the Traffic Calming and Neighborhood Greenways Program-- to replace the NTSP.

Neighborhood Traffic Safety Program (NTSP) Background

Bloomington City Council passed the NTSP as part of Chapter 15 Section 26 of the Bloomington Municipal Code (BMC) in June of 1999. In the twenty-one years since its adoption, very few projects have successfully installed traffic calming as a result of following the current program, and the lack of successful projects is not due to a lack of interest. The threshold that 51% of all eligible households vote in favor of the proposed traffic calming installation is a barrier to successful implementation. The current process is time consuming for both residents and City staff.

An updated program is proposed, and the goals of the new program are as follows: to manage a consistent process; to allocate resources in the most objective and efficient manner; and to provide a pathway for a City-led Traffic Calming and Neighborhood Greenway installation. The recently adopted Transportation Plan stresses implementation of a Bicycle Facilities Network, but the current NTSP does not support such implementation of Neighborhood Greenways, a major component of the bicycle network.

The Updated Policy

The new policy provides two distinct processes to follow in order to install traffic calming; the processes vary according to who is requesting the traffic calming. One process is for resident-led and resident-requested projects, and it functions similar to a grant cycle. The other is a clear process for the City to install traffic calming and Neighborhood Greenways. The two processes are described below and illustrated in the figures that follow:

- **Resident-Led Traffic Calming Process:** this process provides groups of organized residents the ability to request to add speed cushions and devices, in order to slow motor vehicle traffic and mitigate speed non-compliance, (See Figure 1). The process will run as a yearly grant cycle where projects will be objectively evaluated and ranked based upon the incidence of risk-causing factors and prevalence of vulnerable road users. High-ranking projects can be prioritized and funded based on the resources made available for these projects, and as determined by the Bicycle and Pedestrian Safety Commission. An example of possible ranking criteria is provided (see Figure 3).
- **Staff-Led Traffic Calming/ Neighborhood Greenway Process:** allows city staff to address situations that have potential to cause injury or other relatively minor changes that improve safety, especially for vulnerable users. Additionally, this process allows the City to lead the design, public engagement, and installation of Traffic Calming and Neighborhood Greenways, which are outlined in the Transportation Plan. A clear process allows residents and the City the opportunity to plan, engage, and install Neighborhood Greenways (See Figure 2). There is no current process that allows staff to lead and install Traffic Calming or Neighborhood Greenways.

The proposed program provides the City the tools to implement projects identified in the Transportation Plan, to address conditions which can increase risk, and to provide a functional mechanism for concerned residents to pursue safety improvements.

This updated Traffic Calming and Greenways Program is the result of recommendations from a former Council Committee, as well as recommendations in the Comprehensive Plan and the Transportation Plan. In 2012, the

Council formed a Special Committee on Street Design to review the NTSP and make recommendations for updates. Several key recommendations from the Special Committee are included in the proposed program including: rewrite the NTSP; reduce the process to 12 months; make review by the BPSC an integral step; and create a scoring system for potential projects which resembles the Council Sidewalk Committee's system, among other recommendations. The Comprehensive Plan and the Transportation Plan both call to update the traffic calming policy. Additionally, the Transportation Plan recommends using traffic calming as key elements in Neighborhood Greenways, which are integral to creating a transportation network for people walking and bicycling.

Commission Reviews: The Traffic Commission and the Bicycle and Pedestrian Safety Commission support the proposed Traffic Calming and Greenways Program.

Figure 1: A Visual Overview of the Resident-Led Traffic Calming Process

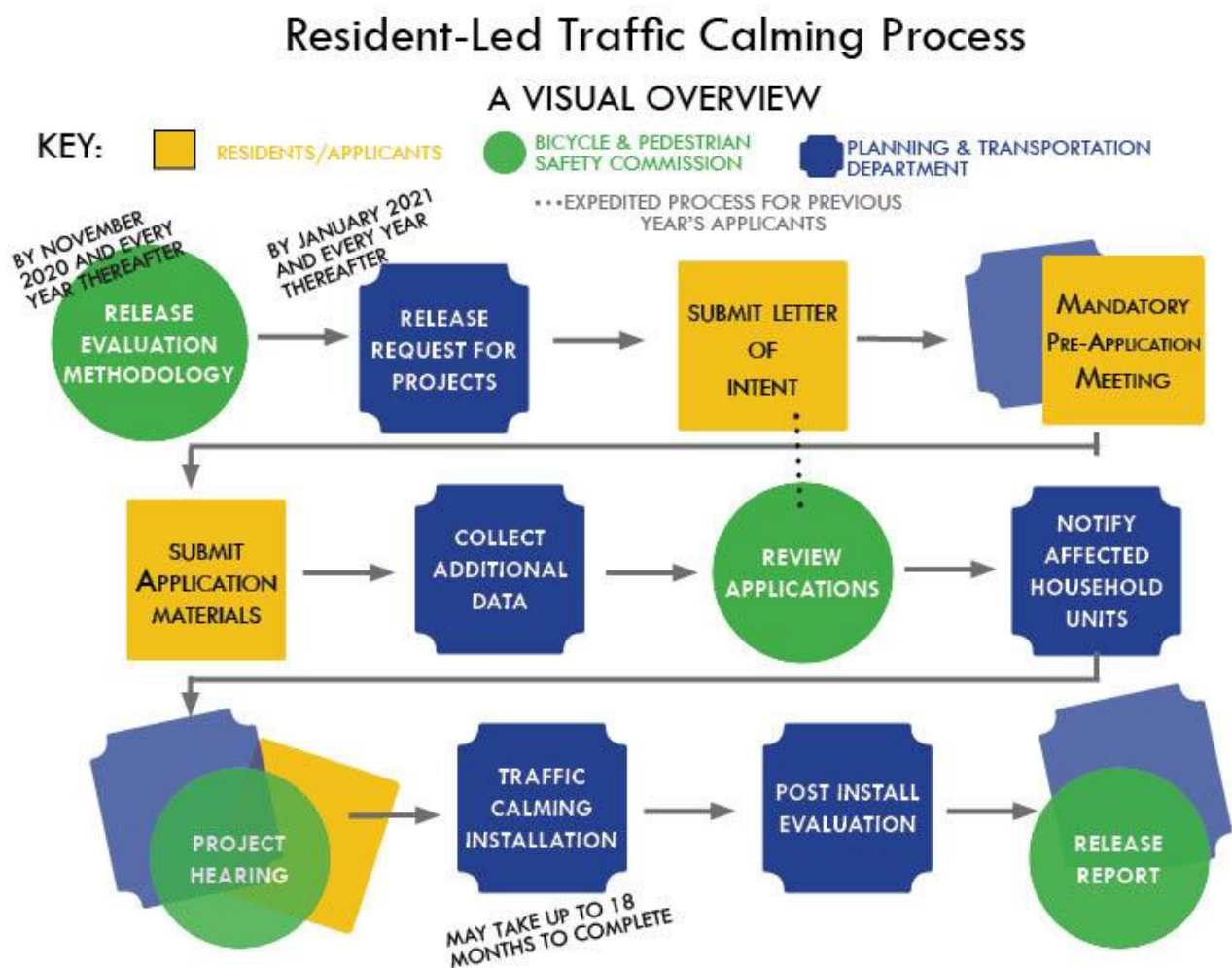


Figure 2: A visual overview of the Staff-Led Neighborhood Greenway Process

Staff-Led Neighborhood Traffic Calming/Greenway Process

A VISUAL OVERVIEW

KEY: ■ RESIDENTS/APPLICANTS ● BICYCLE & PEDESTRIAN SAFETY COMMISSION ■ PLANNING & TRANSPORTATION DEPARTMENT

--- ➔ PROCESS REQUIRED ONLY FOR NEIGHBORHOOD GREENWAYS

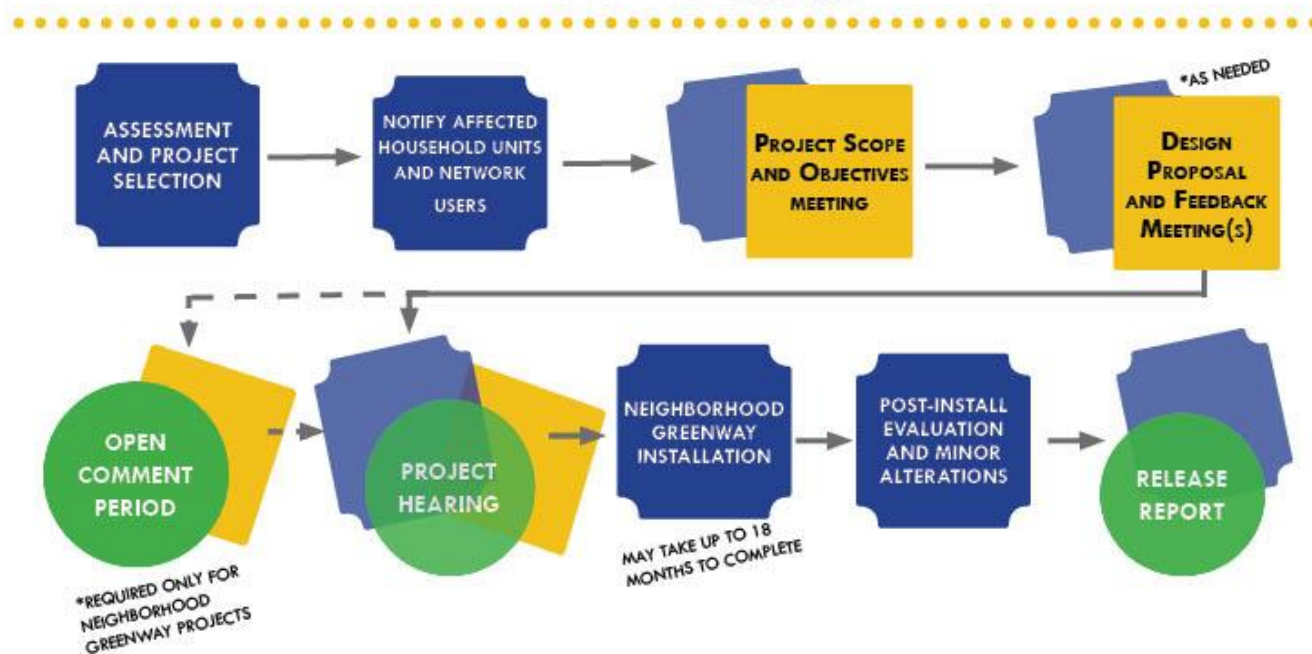


Figure 3: An example Evaluation Methodology Rubric used to rank projects

Performance Objective 1: Areas* that have an increased prevalence of vulnerable users		Example Grading Methodology
1.1	% of households w/ children under the age of 18	1 * % = # of points
1.2	% of households w/ people with disabilities	1 * % = # of points
1.3	% of households with people aged 65+	1 * % = # of points
1.4	% of households with people who are recipients of SNAP benefits	1.3 * % = # of points
1.5	Yes/No Community Place Type: Grade School (Public or Private)	10 points
1.6	Yes/ No Community Place Type: Parks	7 points
1.7	Yes/ No Community Place Type: Community Centers/ Food Pantries	7 points
*unless otherwise defined, “area” comprises of the Census Block Group for which data are available. If a project area spans beyond the boarder of a single Block Group, the represented Block Group percentages shall be averaged with equal weight given to all groups for an aggregate score.		

Performance Objective 2: Areas with an increased incidence of crashes and behaviors which are causal in injury		Example Grading Methodology
2.1	# of fatal or injury causing crashes within the zone (within the past 7 years)	# * 20 = # of points
2.2	# of fatal or injury causing crashes on boundary streets (within the past 7 years)	# * 10 = # of points
2.3	# of MPH above the posted speed limit @ 85 percentile	# = # of points
2.4	# of MPH above the posted speed limit @ 95 percentile	# = # of points
2.5	Vehicle volumes < 400 cars/ day	(x-400) *.05 = # of points
2.6	Residential Density	.01 points for every dwelling unit per km ²
2.7	% of streets with sidewalks on both sides	% *.10 = # of points
2.8	% of streets with sidewalks on one side of the road	% *.25 = # of points
2.9	% of streets with no sidewalks on either side	% * .50 = # of points
Point Total for Performance Objectives 1.1 – 1.7		
Point Total for Performance Objectives 2.1 – 2.9		
Overall Project Total		



TRAFFIC CALMING & GREENWAYS PROGRAM

TABLE OF CONTENTS

Table of Contents.....	2
Background	3
Rationale	3
Guiding principles	4
Resident-Led Traffic Calming Process	5
Bicycle Pedestrian Safety Commission Releases Evaluation Methodology	6
City Releases Request for Projects.....	6
Step 1: Residents Submit Letter of Intent.....	6
Step 2: Pre-Application Meetings with City Staff and Project Organizers	7
Step 3: Residents Submit Application Materials.....	7
Step 4: City Staff Prepare Relevant Data	8
Step 5: BPSC Review of Applications	8
Step 6: Notifications sent to Affected Housing Units in High Ranking Areas	8
Step 7: Project Prioritization Hearing	8
Step 8: Installation	9
Step 9A: Post-Installation Evaluation (<i>Takes Place Concurrently with Step 9B</i>)	9
Step 9B: Maintenance and Minor Alterations (<i>Takes Place Concurrently with Step 9A</i>)	9
Other Processes A: Increased Traffic Calming and Modifications	9
Other Processes B: Removal Process.....	9
Staff-Led Traffic Calming/ Neighborhood Greenway Process:	11
Step 1: Notice Mailing.....	12
Step 2: First Meeting- Project Scope and Objectives Meeting	12
Step 3: Second Meeting- Feedback on Preliminary Design	12
Step 4: Third Meeting (optional) Design/Build out Option Work Meeting	12
Step 5: Open Comment Period (Neighborhood Greenway Projects only)	12
Step 6: BPSC Discussion/Review	13
Step 7: Installation	13
Step 8A: Evaluation	13
Step 8B: Maintenance and Alterations (<i>Happens Concurrently with Step 8A</i>).....	13
Appendix: Visual Overview of Resident-Led and Staff-Led Processes	14
Appendix: Definitions.....	16

BACKGROUND

The City of Bloomington (the City) places a high value on livability. Livability, as a concept, has largely been the rationale for public policies which serve to benefit the community. One such policy, Chapter 15.26, added to the City's Code on June 2, 1999, established the Neighborhood Traffic Safety Program (NTSP). The NTSP aimed to increase a neighborhood's livability by enabling groups of organized residents to manage driving behaviors on neighborhood streets through the installation of speed cushions, chicanes, and other traffic calming devices.

The City of Bloomington Traffic Calming and Greenways Program (TCGP) seeks to replace the NTSP program and envisions a process for Bloomington which is:

- Based upon objective, measurable data
- Viewed through the lenses of connectivity and accessibility
- Aligned with the City's Comprehensive Plan and Transportation Plan
- Managed through a consistent process
- Openly shared and transparent to the community

RATIONALE

The rationale for replacing the NTSP policy is based on the Bloomington Comprehensive Plan (2018) and the Bloomington Transportation Plan (2019):

- Continue to integrate all modes into the transportation network while prioritizing bicycle, pedestrian, public transit, and other non-automotive modes to make our network equally accessible, safe, and efficient for all users (*Comprehensive Plan Goal 6.4*)
- Protect neighborhood streets that support residential character and provide a range of local transportation options (*Comprehensive Plan Goal 6.5*)
 - Implement traffic calming measures where safety concerns exist to manage motor vehicle traffic on residential streets (*Comprehensive Plan, Policy 6.5.1*)
 - Balance vehicular circulation needs with the goal of creating walkable and bike-friendly neighborhoods (*Comprehensive Plan, Policy 6.5.2*)
 - Continue to improve connectivity between existing neighborhoods, existing and proposed trails, and destinations such as commercial areas and schools (*Comprehensive Plan, Policy 6.5.3*)
- Ensure an appropriate process to receive traffic calming requests from residents and include steps for the installation of temporary, proactive traffic calming measures as well as the installation of longer-term measures as a result of a reactive process in response to local concerns (*Transportation Plan, p. 51*)
- Encourage resident involvement (*Transportation Plan, p. 64*)

GUIDING PRINCIPLES

The following eight guiding principles inform the TCGP:

1. Evaluation and prioritization of TCGP installations should be based upon objective, pre-established criteria; be in alignment with the City of Bloomington adopted plans and goals; and be reviewed by a designated City Commission who oversee traffic calming, and/or long range transportation planning.
2. Traffic Calming and Greenways Program projects shall enhance pedestrian, bicyclist, and other **micromobility** mode user's access through the neighborhood and preference shall be given to projects that enhance access to transit as well.
3. Traffic calming devices should be planned and designed in keeping with planning and engineering best practices.
4. Reasonable emergency and service vehicle access and circulation should be preserved.
5. City staff shall direct the installation of traffic calming measures in compliance with this policy and as adopted into Bloomington Municipal Code.
6. The TCGP is mainly intended for: **Shared Street**, **Neighborhood Residential Street**, and **Neighborhood Connector Street** typologies and, on occasion, may include traffic calming elements as part of a larger infrastructure project.
7. Some motorists may choose to reroute from one neighborhood street to another as a result of an TCGP project. In some cases, this rerouting may require updates to a project, but the goals of mode shift and improved safety for all road users should generally supersede minor shifts in rerouting. Minor increases in traffic volumes on adjacent streets are anticipated and acceptable levels should be defined on a project-by-project basis.
8. Processes shall provide for reasonable but not onerous resident participation in plan development and evaluation.

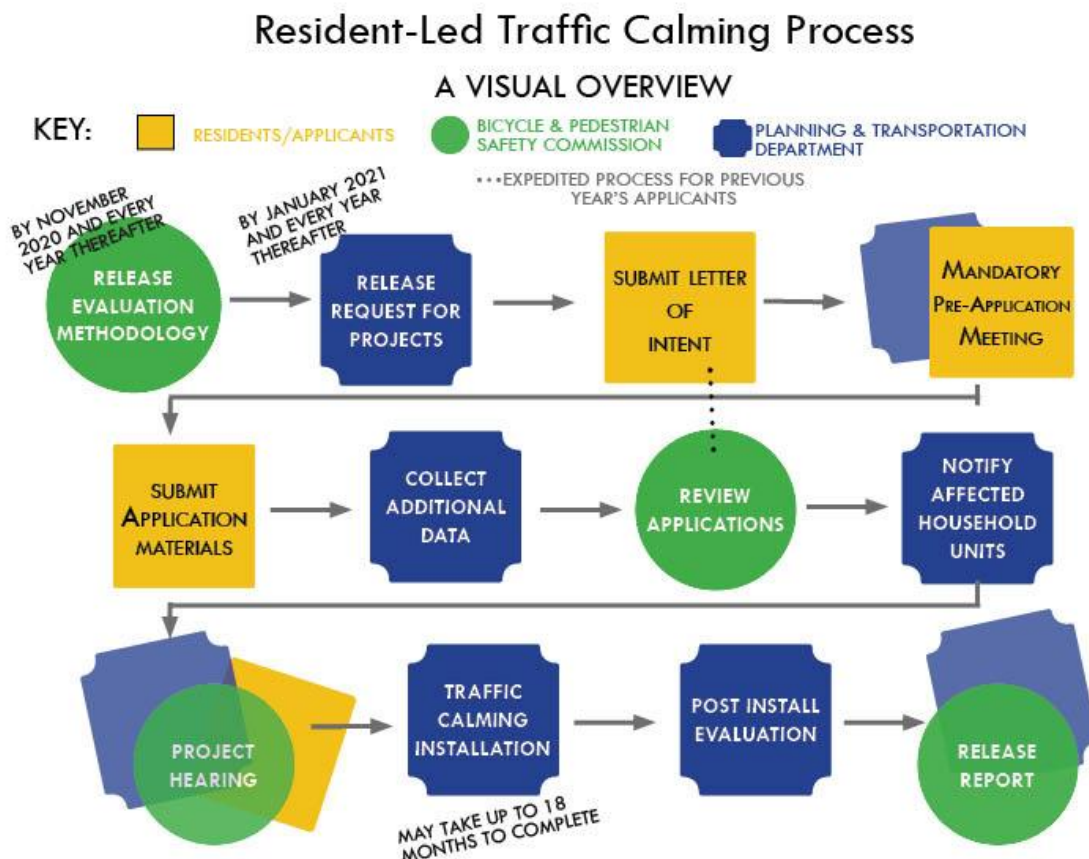
RESIDENT-LED TRAFFIC CALMING PROCESS

The TCGP provides a mechanism for residents to work with the City to manage traffic in their neighborhoods. The TCGP is intended to provide a simple process for residents to address traffic and speeding concerns on neighborhood streets. The TCGP processes also provide a consistent framework to ensure efficient use of resident and City staff time.

This section describes in detail the steps involved in participating in the Resident-led Traffic Calming process including the City's request for projects, the application requirements, benchmark data collection, the review and prioritization of high-ranking projects, the installation of traffic calming devices, and an evaluation of the project's success. The Resident-Led Traffic Calming Process is illustrated below in Figure 1 and in the [Appendix](#).

Traffic Calming devices primarily considered for this program include **speed cushions** and **speed humps**, in some contexts other devices may also be considered.

Figure 1: Visual Overview of the: Resident-led Traffic Calming Process



BICYCLE PEDESTRIAN SAFETY COMMISSION RELEASES EVALUATION METHODOLOGY

The Evaluation Methodology defines the objective criteria used to review project requests. The evaluation methodology is reviewed each year before the start of a new process cycle. By November 30, 2020 and by November 30 of each year thereafter, the Bicycle Pedestrian Safety Commission (BPSC) shall submit revisions of the TCGP Evaluation Methodology to the Planning and Transportation Department as well as a report that includes the following:

- Any changes to the application evaluation methodology from the previous year;
- A status report on the previous years' designed and installed projects; and
- Projects which applied for funding but did not receive funding based on the priority ranking during the previous year's cycle.

CITY RELEASES REQUEST FOR PROJECTS

In January 2021 and every year in January thereafter, the City Planning Department will release a Request for Projects (RFP) for participation in the Traffic Calming and Greenways Program. Each RFP issued shall be dependent upon funding availability, and the amount of available funding may be made known to prospective applicants. Requests for participation will be made through the BPSC and City staff to residents upon the opening of the RFP process.

STEP 1: RESIDENTS SUBMIT LETTER OF INTENT

Residents who wish to engage in the TCGP must submit a Letter of Intent (LOI) to the Planning Department before the end of the posted deadline. Prospective applicants are responsible for checking the TCGP guidelines for additional formatting and submission requirements. The LOI from the interested parties shall include but may not be limited to:

- Contact information for a minimum of two project co-organizers;
- Project organizers must represent two (2) separate dwelling units within the proposed area to be considered.
 - Individuals who reside in the same dwelling shall not be permitted to serve as project co-organizers without the collaboration of a neighbor or resident of a differing dwelling unit.
 - Individuals who reside in different dwelling units of a larger multi-family complex shall be permitted to serve as project co-organizers.
- A general description of the concern;
- A map of the proposed area to be considered;
- Acknowledgement of program policies; and
- Any supplemental information requested by staff.

Previous Applicants: Project co-organizers who have submitted an application for the previous one (1) year program cycle and did not receive funding may reapply with an updated LOI and any supplemental materials requested by City Staff.

Staff Action: When the submission window has closed, City staff shall review each of the LOIs. City staff will notify applicants who have met the requirements to advance to the application process of the Resident-led Traffic Calming Process. In the event that an application does not meet the minimum

requirements to apply, City staff may notify the project co-organizers and allow up to 4 additional business days to resubmit with recommended changes dependent upon the quantity and extent of changes needed. LOIs which do not meet the minimum requirements will not progress beyond Step 2 of the Resident-led Traffic Calming Process and shall be notified by City staff.

STEP 2: PRE-APPLICATION MEETINGS WITH CITY STAFF AND PROJECT ORGANIZERS

City staff shall schedule a mandatory meeting with each group of project co-organizers who have advanced to Step 2 of the Resident-led Traffic Calming Process. At the mandatory pre-application meeting staff shall:

- Discuss the application requirements, processes, and deadlines;
- Disseminate preliminary information required in the application;
- Provide a link to the application materials; and
- Answer questions from the project organizers.

STEP 3: RESIDENTS SUBMIT APPLICATION MATERIALS

Project co-organizers will have approximately six to eight weeks to complete and submit their applications. Application materials shall include:

- Three (3) Letters of Support from stakeholders.
 - Must include at least one (1) City Council Representative
 - May include an organization or professional which serves the residents living within the identified area (i.e., neighborhood association, school, neighborhood resource specialist, faith based organization, and/or a non-profit which serves households located within the specified area but may not necessarily be located within the specified zone)
 - Only three letters will be reviewed. Additional letters will not be reviewed with the project application.
- Twenty-four (24) or 51% (whichever is the lesser) signatures from **Affected Housing Units** impacted by the traffic calming installations proposed.
 - Staff shall provide a template document for collecting signatures which must be used for collecting signatures. No other forms will be accepted.
 - Electronic signatures may be used for this purpose if deemed appropriate and with written approval of the City Planning Department Director.
- A finalized map of the proposed project area.
- Additional relevant data requested by City staff

City staff shall send a confirmation email once an application has been received. In the event that an application requires clarification or has proposed a zone which is incompatible with the program, City staff may notify the project organizers and allow up to an additional 4 business days to resubmit with recommended changes dependent upon the quantity and extent of changes needed. Incomplete applications which are submitted with insufficient supporting documents/ materials will not progress beyond Step 3 of the Resident-led Traffic Calming Process and shall be notified by City staff.

STEP 4: CITY STAFF PREPARE RELEVANT DATA

City staff shall collect preliminary information about current traffic conditions. Relevant data may include crash history, speed counts and volume data, and other relevant facts. City staff shall notify the affected safety and emergency services of the initiative to include but not be limited to: the Bloomington Police Department, Bloomington Fire Department, local ambulance services, and Bloomington Transit.

City staff may collect and summarize preliminary information about existing plans for development, census data, and pedestrian and bicycle network infrastructure near the proposed project.

STEP 5: BPSC REVIEW OF APPLICATIONS

Upon the receipt of completed applications, the BPSC will review the materials submitted and the preliminary data collected by City staff. The BPSC will validate successful applications, and rank the projects which score highest as determined by the evaluation methodology. All applications will be evaluated using the same criteria.

The evaluation criteria for the Resident-led Traffic Calming Process must account for two main areas of emphasis:

1. Prevalence of vulnerable users (e.g., children, persons with disabilities, older adults, economically disadvantaged households) and community centers.
2. Incidence of crashes and behaviors which are the causal factors for increased injury to vulnerable users (crashes, speeding, volume).

STEP 6: NOTIFICATIONS SENT TO AFFECTED HOUSING UNITS IN HIGH RANKING AREAS

Notifications will be sent via post to **Affected Housing Units** and electronically to **Network Users** in the areas surrounding projects that are likely to be funded based upon the number of applications and the designated resources for traffic calming.

Information presented in the notification shall include:

- Information related to the location and placement of the proposed traffic calming installations;
- The objectives for the traffic calming;
- Notification of all scheduled meetings associated with the project and prioritization process; and Contact information and project website to direct feedback, ask questions, or present concerns.

STEP 7: PROJECT PRIORITIZATION HEARING

The BPSC shall host a hearing in which **Affected Housing Units**, **Network Users**, and members of the public may voice their questions, concerns, support, or critique of the Traffic Calming project. Based upon information gleaned at the prioritization hearing, the BPSC may vote to advance fundable projects to the design/ installation phase for those which rank highest unless extenuating circumstances become known which calls into question a project's merit or evidence that an application was not put forth in good faith with the program policies.

STEP 8: INSTALLATION

City staff will proceed with final design and installation. Planning, design, and construction may take up to 18 months depending on the scope of the project. Installations will typically be planned with permanent materials; however, using temporary materials may be appropriate to evaluate design options or to accelerate project timelines.

STEP 9A: POST-INSTALLATION EVALUATION *(TAKES PLACE CONCURRENTLY WITH STEP 9B)*

Up to 18 months after the construction of the Traffic Calming project, the City may conduct a follow-up evaluation. After the installation has been completed, City of Bloomington Planning Department Staff will work to gather data which may include traffic counts, speed studies, and crash history. In some instances, evaluations of adjacent and parallel streets will also be included.

STEP 9B: MAINTENANCE AND MINOR ALTERATIONS *(TAKES PLACE CONCURRENTLY WITH STEP 9A)*

The City of Bloomington Planning Department is responsible for the construction and the minor alteration of any traffic calming device implemented as part of the Resident-led Traffic Calming Process. Alterations may occur either during the design of the project or after the construction is complete. Changes to signs, markings, or location of traffic calming devices may be considered minor alterations. Other changes which could have a more significant impact on a street's operations should follow the Staff-led Traffic Calming/Neighborhood Greenways Process or the Resident-led Traffic Calming Process in subsequent funding cycles.

The Department of Public Works will be responsible for maintenance of completed Traffic Calming installations.

OTHER PROCESSES A: INCREASED TRAFFIC CALMING AND MODIFICATIONS

If residents desire to have their traffic calming modified to include major alterations, a request in writing must be made to City Planning and Transportation staff. Requests for traffic calming tools beyond those typically used for Resident-led projects shall require staff approval in writing. Projects that are able to be supported and prioritized for increased traffic calming will follow the Staff-led Traffic Calming/Neighborhood Greenways Process beginning at [Step Six](#). In some cases, the City may choose to start at an earlier step in the process.

Residents may request to make major modifications to existing traffic-calming on public streets by applying to the Resident-led Traffic-Calming Process. To request major modifications to existing traffic calming, residents shall follow the Resident-Led Process, starting at [Step 1](#) but may not do so within 7 years of the date which the traffic calming installation was approved.

OTHER PROCESSES B: REMOVAL PROCESS

If residents of a neighborhood request to have their traffic calming installations removed, an application shall be submitted with no less than sixty-six (66) percent of the **Affected Housing Units** in support of the removal. Removal of Traffic calming must be based upon the same boundaries as the original project request and may not be divided into smaller portions thereof. Applications for removal and required

signatures shall not be submitted within 7 years of the date which the traffic calming installation was approved. City staff shall provide a template document for collecting signatures which **must** be used for collecting signatures required for traffic calming removal. No other forms will be accepted for this purpose. The City may provide an electronic signature option if deemed appropriate and with written approval of the City Planning Department Director.

City Planning Department staff shall validate completed applications and present it to the Bicycle Pedestrian Safety Commission for approval. Based upon the application materials provided, traffic speed and volume data, and public comment, BPSC shall vote to remove the traffic calming installations (or any portion thereof) unless sixty-six (66%) percent majority of BPSC appointed members vote to deny the removal of the traffic calming installations.

In some extenuating circumstances, the City Engineer may remove a traffic calming installation if they find it poses increased and unnecessary risk to public. In the event of such circumstances, the Engineer must submit a report within 180 days of the removal of a traffic calming device to both the BPSC and City Council explaining the rationale which the removal was deemed necessary.

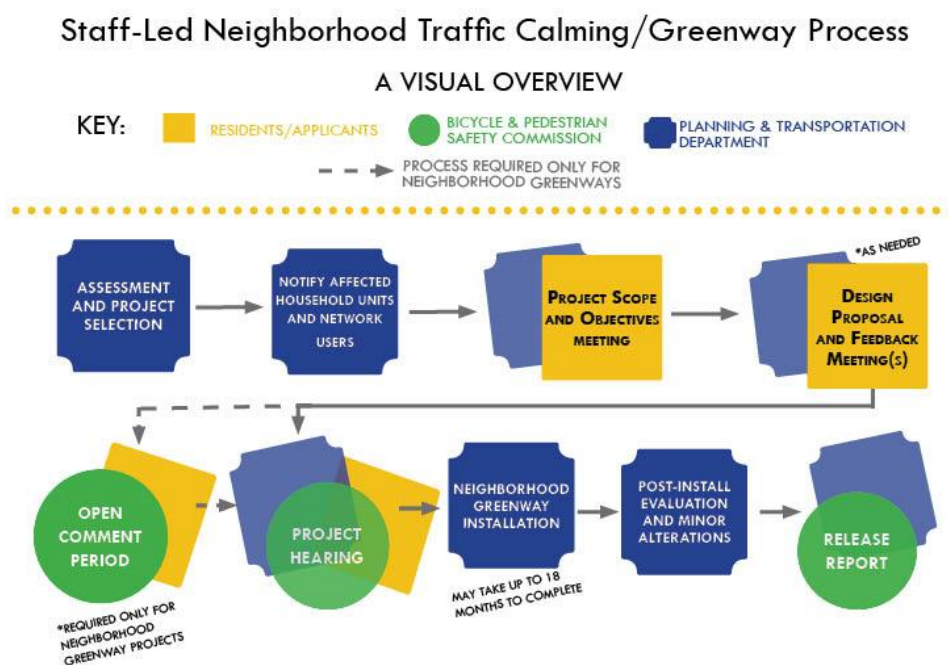
STAFF-LED TRAFFIC CALMING/ NEIGHBORHOOD GREENWAY PROCESS:

The Staff-led Traffic Calming/ Neighborhood Greenway Process provides a framework for Planning and Engineering Department staff to identify and implement traffic calming projects, improve safety and/or support pedestrian, bicyclist, or transit initiatives.

Traffic Calming, or devices used for reducing speeds on residential streets are defined by state code and may include: speed bumps, curb extensions, chicanes, and/or diagonal diverters. While the state provides a definition for specific traffic-calming devices which may be used, there are other street design elements (i.e., adding on-street parking, the design of on-street parking, narrowing lanes) which may result in slowing motorized vehicle traffic. These design elements alone do not trigger the Staff-Led Traffic Calming process. However, the design strategies may be included in a traffic-calming project.

A **Neighborhood Greenway** is a street that serves as a shared, slow street with the intention of prioritizing bicycling and improving walking. The Bloomington Transportation Plan identifies certain streets as Neighborhood Greenways. Traffic Calming installations, signs, and pavement markings are often used to create the basic elements of a Neighborhood Greenway-- but are, in and of themselves not Greenways for the purposes of the program until they are identified within the Transportation Plan. To be considered for as a Neighborhood Greenway, a street must be identified as a Neighborhood Greenway in the Bicycle Facilities Network in the Bloomington Transportation Plan.

This section describes in detail the steps involved in the Staff-led Traffic Calming/Neighborhood Greenways Process including the City's notification to the public, the process for gaining feedback from **Affected Housing Units**, and the installation and evaluation for each Neighborhood Greenway project. The Staff-led Neighborhood Greenway Process is illustrated below in Figure 2 and in [the Appendix](#).



STEP 1: NOTICE MAILING

City staff shall notify **Affected Housing Units** by a postal mailing and electronically to **Network Users** in advance of any work sessions or meetings which discuss the installation of the Traffic Calming/ Neighborhood Greenway project.

The intent of the notification is to alert residents and stakeholders of the project and provide details of upcoming meetings. Other notifications, such as postings on social media or signs posted in the vicinity of the proposed project, are additional measures which may be used to increase engagement with residents.

STEP 2: FIRST MEETING- PROJECT SCOPE AND OBJECTIVES MEETING

City Planning and Transportation Department Staff shall host a meeting about the proposed project. Staff will seek input from residents, stakeholders, and **Network Users**. Staff will present information including but not limited to the following:

- What is Traffic Calming? What is a Neighborhood Greenway?
- What are the boundaries of this phase of the project?
- How do the Traffic Calming/ Neighborhood Greenways support the City's Comprehensive Plan and Transportation Plan goals for multimodal connectivity?
- What are the funding limitations for this project or phase?

STEP 3: SECOND MEETING- FEEDBACK ON PRELIMINARY DESIGN

City staff will host a second meeting to share the preliminary design and to take input from residents and users.

STEP 4: THIRD MEETING (OPTIONAL) DESIGN/BUILD OUT OPTION WORK MEETING

A third meeting is optional, based on feedback of the preliminary design.

STEP 5: OPEN COMMENT PERIOD (NEIGHBORHOOD GREENWAY PROJECTS ONLY)

Staff-led Neighborhood Greenway plans shall be made available for comment by **Affected Housing Units, Network Users**, and other stakeholders. Comments shall be made on the project website, email, phone, or post mail. Comments housed in social media platforms and listservs will not be considered in the BPSC Discussion/ Review.

The open comment period is expected to last 4 weeks, unless extenuating circumstances require a longer timeframe. When City staff feel confident that a design best suited to the project and location has been achieved, the proposed Staff- Led Neighborhood Greenway installation will proceed forward to the BPSC Discussion and Review Phase.

STEP 6: BPSC DISCUSSION/REVIEW

City staff shall present the project, objectives, baseline data, notes from public meetings, and design concepts to the BPSC for review. By default, projects will proceed, unless a seventy-five percent (75%) of the BPSC appointed members vote to send the project back to the City staff for further refinement.

STEP 7: INSTALLATION

City of Bloomington Planning Department shall install the Traffic Calming or Neighborhood Greenways. The installation is intended to be constructed with permanent materials; however, in some cases, using temporary materials may be appropriate in order to evaluate design techniques or to accelerate project timelines.

STEP 8A: EVALUATION *(HAPPENS CONCURRENTLY WITH STEP 8B)*

Within eighteen months after the construction of a Traffic Calming/ Neighborhood Greenway project is complete, the City may conduct a follow-up evaluation. This evaluation may include traffic counts, speed studies, and crash history. In some instances, evaluations of adjacent and parallel streets will also be beneficial.

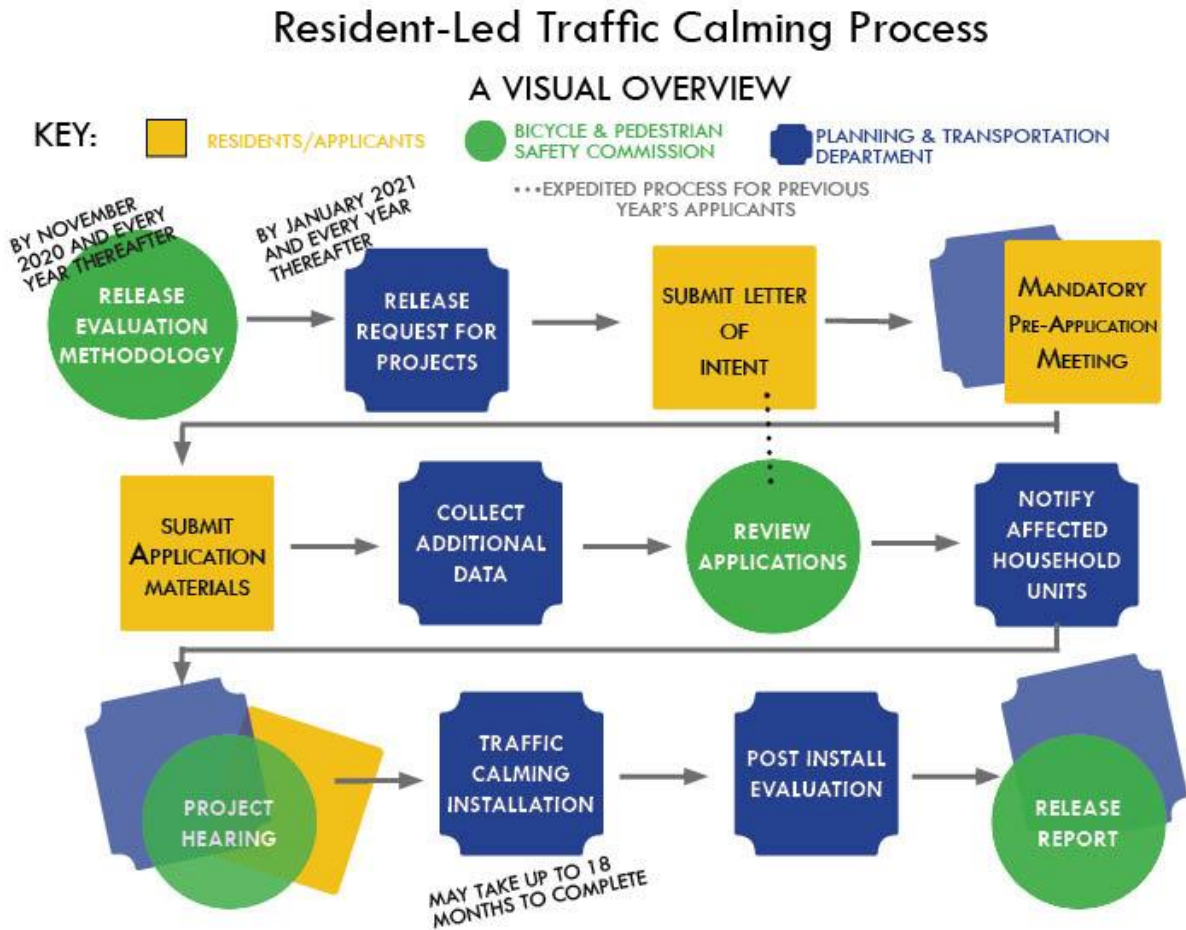
STEP 8B: MAINTENANCE AND ALTERATIONS *(HAPPENS CONCURRENTLY WITH STEP 8A)*

The City of Bloomington Planning Department is responsible for the construction and the minor alterations of any traffic calming device implemented as part of the program. These alterations may occur either during the design of the project or after the construction is complete. Changes to signs, markings, or location of traffic calming devices may be considered **minor alterations**.

City Staff may request to make **major modifications** to existing traffic calming installations on public streets by following the Staff-led Traffic Calming and Neighborhood Greenways Process, starting at [Step 6](#). In some cases, the City may choose to start at an earlier step in the process.

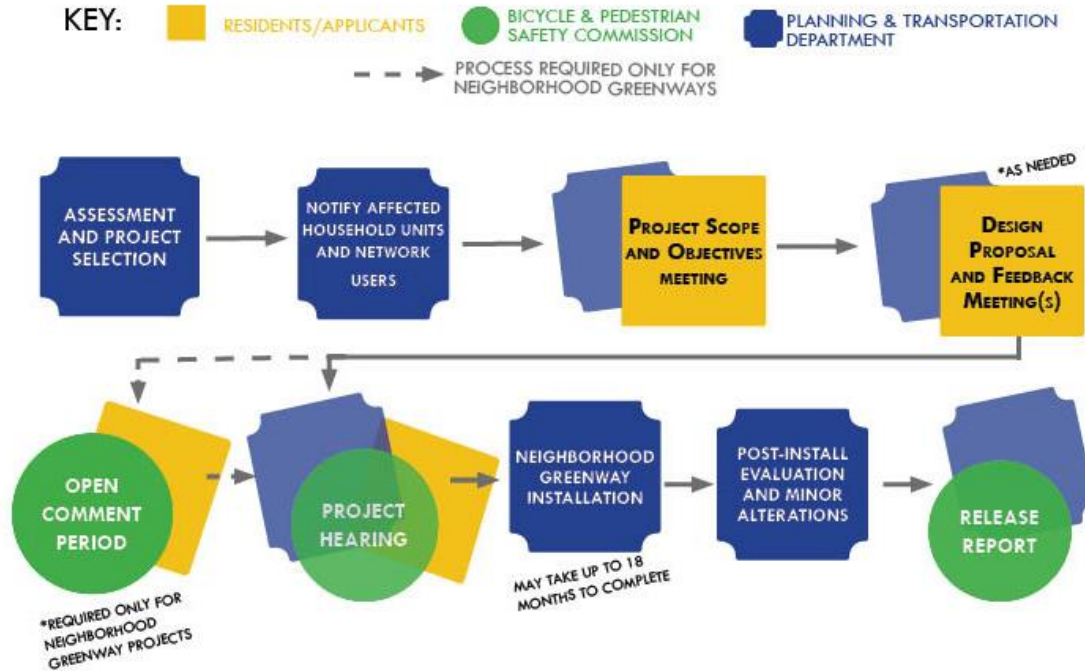
The Department of Public Works will be responsible for maintenance of completed Traffic Calming/ Neighborhood Greenway installations.

APPENDIX: VISUAL OVERVIEW OF RESIDENT-LED AND STAFF-LED PROCESSES



Staff-Led Neighborhood Traffic Calming/Greenway Process

A VISUAL OVERVIEW



APPENDIX: DEFINITIONS

Affected Housing Units: residents and property owners of record located within two lots not to exceed 300 feet of streets affected by the proposed traffic calming installation.

Major alterations: A change other than a minor alteration.

Micromobility: a category of modes of transport that are provided by very light vehicles such as scooters, electric scooters, electric skateboards.

Minor alterations: a change which has no appreciable effect on the surface area of the street dedicated to the travel for motor vehicles. Changes to signs, markings, parking policies or location of traffic calming devices may be considered minor alterations. All other changes are considered 'major alterations.'

Neighborhood Connector Street: streets which provide connections between the neighborhood residential and general urban or suburban connector streets. They collect traffic from residential neighborhoods and distribute it to the broader street network. Most of the land uses surrounding neighborhood connectors are generally low/medium-density residential with commercial nodes as it connects to the larger street network.

Neighborhood Residential Street: streets that provide access to single and multifamily homes and are not intended to be used for regional or cross-town motor vehicle commuting. Neighborhood residential streets have slow speeds and low vehicular volumes with general priority given to pedestrians.

Neighborhood Greenway: a low-speed, low-volume shared roadway that creates a high-comfort walking and bicycling environment. Neighborhood Greenways are identified in the Bloomington Transportation Plan.

Network Users: People who utilize a street for their primary means of access to pedestrian, bicycle, or transit networks.

Shared Streets: Streets designed for pedestrians, bicyclists, transit riders, and motorists to operate in a "shared" space; shared streets utilize design elements such as pavement treatments, planters, roadway widths, parking spaces, and other elements to direct traffic flow and to encourage cooperation among travel modes in typically flush or curbless environments.

Speed Cushions: speed humps that include wheel cutouts to allow large vehicles, cyclists, scooters and strollers to pass unaffected, while reducing passenger car speeds.

Speed Humps: a ridge set in a road surface, typically at intervals, to control the speed of vehicles.

Traffic Calming: methods described within the state code which are used to slow cars on residential streets. Traffic Calming devices may include curb extensions, chicanes, and/or diagonal diverters.

ORDINANCE 99-16

**TO AMEND TITLE 15 OF THE BLOOMINGTON MUNICIPAL CODE ENTITLED
"VEHICLES AND TRAFFIC"
(Adding Chapter 15.26 Establishing the Neighborhood Traffic Safety Program)**

- WHEREAS, the City of Bloomington places a high value on neighborhood livability; and
- WHEREAS, neighborhood traffic conditions can have a significant impact on livability; and
- WHEREAS, the City of Bloomington is committed to developing an effective approach to managing neighborhood traffic; and
- WHEREAS, Indiana Code 9-21-4-3 authorizes local authorities to place and maintain traffic control devices as they determine necessary to carry out local ordinances or to regulate, warn or guide traffic; and
- WHEREAS, the City of Bloomington has developed a Neighborhood Traffic Safety Program in order to guide the decision making process for placement of traffic calming and related traffic control devices in neighborhoods;

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION 1. The Table of Contents for Title 15 shall be amended to add Chapter 15.26 Neighborhood Traffic Safety Program to the list of chapters.

SECTION 2. Title 15 of the Bloomington Municipal Code, entitled "Vehicles and Traffic," shall be amended by adding Chapter 15.26, entitled "Neighborhood Traffic Safety Program," and that chapter shall read as follows:

Chapter 15.26

NEIGHBORHOOD TRAFFIC SAFETY PROGRAM

Sections:

- 15.26.010 Definitions
- 15.26.020 Neighborhood Traffic Safety Program
- 15.26.030 Utilization of Neighborhood Traffic Safety Program Locations

15.26.010 Definitions. When appearing in this chapter the following phrases shall have the following meanings:

"Traffic calming device" has the meaning set forth at Indiana Code 9-21-4-3(a).

15.26.020 Neighborhood Traffic Safety Program. The Neighborhood Traffic Safety Program developed by the City of Bloomington Engineering Department and the Bicycle and Pedestrian Safety Commission shall be incorporated by reference into this chapter and includes any amendments to the program, as approved by the Common Council by ordinance. Pursuant to I.C. 36-1-5-4, two copies of the Neighborhood Traffic Safety Program shall be available in the City Clerk's office for public inspection.

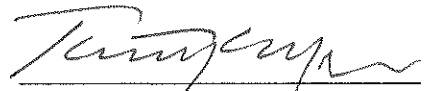
15.26.030 Utilization of Neighborhood Traffic Safety Program. The City of Bloomington shall follow the policies and procedures set forth in the Neighborhood Traffic Safety Program to determine the appropriate location and construction of traffic calming devices and related traffic control devices in neighborhoods.

15.26.040 Traffic Calming Locations. The locations described in Schedule J-1, attached hereto and made a part hereof, shall have devices installed for the purpose of neighborhood traffic calming.

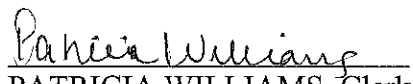
SECTION 3. Severability. If any sections, sentence or provision of this ordinance, or the application thereof to any person or circumstances shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions, or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

SECTION 4. Enactment. This ordinance shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington and approval of the Mayor.

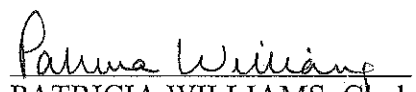
PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this 2nd day of June, 1999.


TIMOTHY MAYER, President
Bloomington Common Council

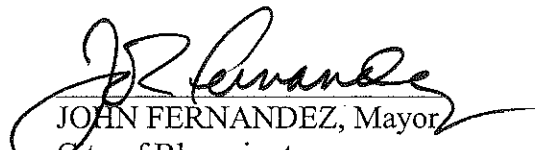
ATTEST:


PATRICIA WILLIAMS, Clerk
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this 2nd day of June, 1999.


PATRICIA WILLIAMS, Clerk
City of Bloomington

SIGNED and APPROVED by me upon this 2nd day of June, 1999.


JOHN FERNANDEZ, Mayor
City of Bloomington

SYNOPSIS

This ordinance adopts the Neighborhood Traffic Safety Program developed by the Engineering Department and the Bicycle and Pedestrian Safety Commission, thereby setting out standards for the placement of neighborhood traffic calming and related traffic control devices. The program requires approval of a traffic safety plan by the majority of the neighborhood involved, the Common Council, and the Board of Public Works. The ordinance also establishes a schedule of the types and locations of traffic calming devices on city streets.

Signed copies to:
BMC File
Clerk
CA/CA

Legal - 5
PED
Engineering

Public Works
Engineering
Bike + Ped Commission

Traffic Program attached to
Ordinance and also in
Ordinance 99-16 Back up File

NEIGHBORHOOD TRAFFIC SAFETY PROGRAM

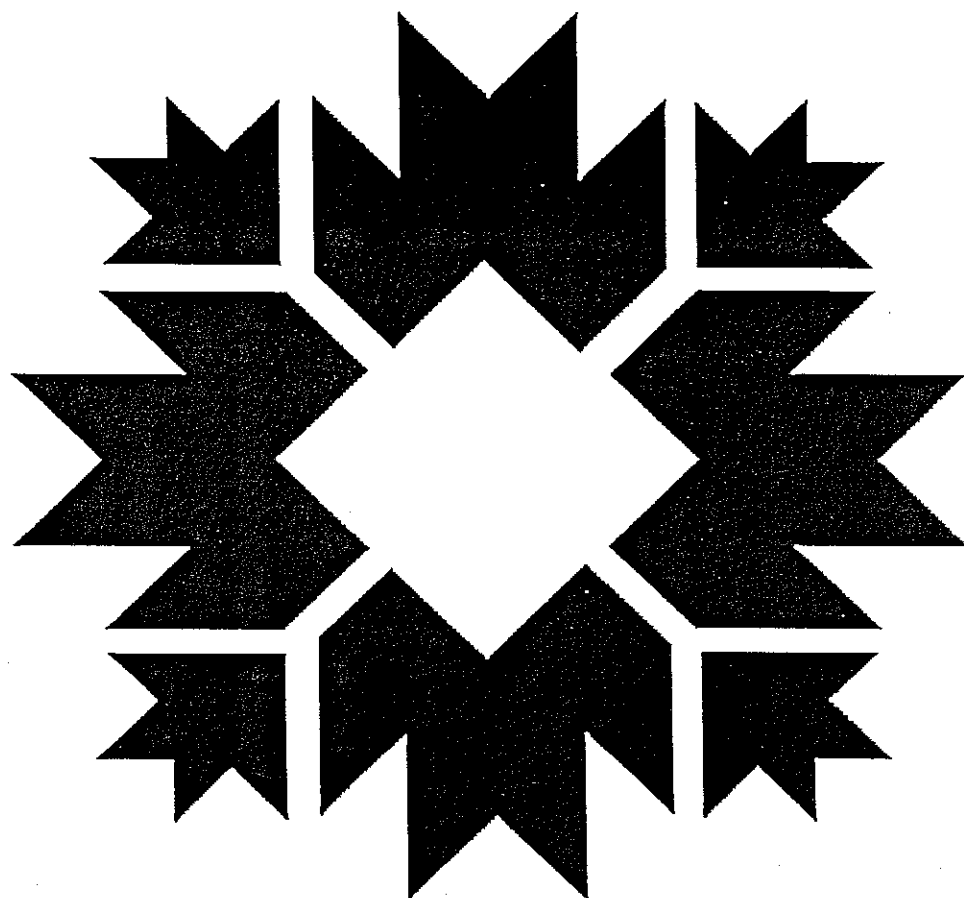


Table of Contents	Page
INTRODUCTION	2
Objectives	2
Policies	3
Procedure/Process	3
Step 1. Apply to Participate	4
Step 2. Engineering Staff Review and Preliminary Data Collection	4
Step 3. BPSC Review of Engineering Studies and Petitions	4
Step 4. Public Meeting	4
Step 5. Preparation of Alternative Designs and Selection of Proposed Plan	5
Step 6. Project Ballot	5
Step 7. Testing and Evaluation of Traffic Calming Device	6
Step 8. Common Council Action	6
Step 9. Board of Public Works	7
Step 10. Construct Permanent Traffic Calming Device(s)	7
Step 11. Maintenance	7
Step 12. Follow-up Evaluation	7
APPENDIX A	
VISION AND MISSION STATEMENT OF THE CITY OF BLOOMINGTON	8
APPENDIX B	
POINT ASSIGNMENT FOR RANKING NTSP REQUESTS	9
APPENDIX C	
TRAFFIC CALMING DEVICES	10
1. Street and Lane Narrowing	10
2. Bicycle Lanes	10
3. Raised Street Sections or Speed Humps	11
4. Full or Partial Road Closures (Semi-Diversers/Diversers/Cul-de-sacs)	12
5. Chicanes	12
6. Traffic Circles	12
Stop Signs	14
APPENDIX D	
NEIGHBORHOOD TRAFFIC SAFETY TECHNIQUES	15

INTRODUCTION:

The City of Bloomington places a high value on neighborhood livability. Although livability can have several definitions, it can be generally thought of as encompassing the following characteristics:

- The ability of residents to feel safe and secure in their neighborhood.
- The opportunity to interact socially with neighbors without distraction or threats.
- The ability to experience a sense of home and privacy.
- A sense of community and neighborhood identity.
- The ability to conveniently, safely and enjoyably walk, bike and take transit.
- The ability of parents to feel that their children's safety is not at risk by playing in the neighborhood.
- A balanced relationship between multiple uses and needs of a neighborhood.

Neighborhood traffic conditions can have a significant impact on these characteristics.

As population and employment in the City of Bloomington and Monroe County continue to grow, Bloomington streets can be expected to experience increased pressure from traffic. One of several goals of the City of Bloomington is to manage this growth to balance our economic, social and environmental health and to maintain a sustainable City. Quality neighborhoods are the fundamental building blocks of a sustainable city, and to maintain this quality, Bloomington neighborhoods should be protected from the negative impacts of traffic.

Neighborhood groups across Bloomington have become increasingly concerned about the effects of traffic on their streets. Restraining traffic has become a common goal of concerned residents. A vision now being promoted for local streets is that motorists should be guests and behave accordingly. Many City streets used to be multi-purpose places which not only provided physical access but also encouraged social links within a community. Now, the balance has changed so that the main function of many streets has become the accommodation of traffic--some of it unrelated to the residents themselves.

At the same time, traditional Traffic Engineering means of controlling traffic--speed zoning, stop signs, traffic signals--have less and less effect in the management of driver behavior. Police enforcement is and will remain an effective tool to reinforce motorist behavior. However, it is recognized that providing an enforcement level that is effective in modifying driver behavior will require a significant commitment of Police resources.

The City of Bloomington is committed to developing an effective approach to managing neighborhood traffic. Neighborhood involvement will be an important component of this approach.

To maximize neighborhood involvement in improving local traffic conditions, the City of Bloomington Bicycle and Pedestrian Safety Committee (BPSC) with assistance from the Public Works, Engineering and Planning Departments has developed a Neighborhood Traffic Safety Program (NTSP) for Bloomington neighborhoods.

Objectives

The following objectives of the NTSP are derived from existing City policies and the mission of the BPSC:

1. Improve neighborhood livability by mitigating the negative impact of vehicular traffic on residential neighborhoods.

2. Promote safe, reasonably convenient, accessible and pleasant conditions for bicyclists, pedestrians, motorists, transit riders and residents on neighborhood streets.
3. Encourage citizen involvement in all phases of Neighborhood Traffic Safety activities.
4. Make efficient use of City and citizen resources and energy.

Policies

The following policies are established as part of the NTSP:

1. Through traffic should be encouraged to use higher classification arterials, as designated in the *Master Thoroughfare Plan* for the *City of Bloomington Comprehensive Plan*.
2. A combination of education, enforcement and engineering methods should be employed. Traffic calming devices should be planned and designed in keeping with sound engineering and planning practices. The City Engineer shall direct the installation of traffic control devices (signs, signals, and pavement markings) as needed to accomplish the project, in compliance with the Bloomington Municipal Code. (Refer to Appendix C for a detailed description of traffic calming devices.)
3. Application of the NTSP shall be limited to local streets and to those neighborhood collector streets that are primarily residential (at least 75 percent of the properties with frontage on the street must be in residential zoning). Traffic safety projects on neighborhood collector streets shall not divert traffic off the project street through the use of traffic diversion devices. As a result of a project on a neighborhood collector, the amount of traffic increase acceptable on a parallel local service street shall not exceed 150 vehicles per day.
4. Reasonable emergency and service vehicle access and circulation should be preserved.
5. NTSP projects should encourage and enhance pedestrian and bicycle mobility and access within and through the neighborhood and enhance access to transit from the neighborhood. Reasonable automobile access should also be maintained.
6. Some traffic may be rerouted from one local service street to another as a result of an NTSP project. The amount of rerouted traffic that is acceptable should be defined on a project-by-project basis by the BPSC and City Engineering staff.
7. To implement the NTSP, certain procedures shall be followed by the Engineering Department in processing traffic safety requests in accordance with applicable codes and related policies and within the limits of available and budgeted resources. At a minimum, the procedures shall provide for submittal of project proposals, citizen participation in plan development and evaluation; communication of any test results and specific findings to area residents, businesses, emergency services and affected neighborhood organizations before installation of permanent traffic calming devices; and appropriate Common Council review.

Procedure/Process

The NTSP provides a mechanism for groups to work with the City to make decisions about how traffic safety techniques might be used to manage traffic in their neighborhood. This section describes in detail the steps involved in participating in the program from the initial application for involvement, to

developing a traffic safety plan, to installing one or more traffic calming devices, to a follow-up evaluation of the plan's success.

The NTSP process is intended to ensure that all neighborhood stakeholders are provided the opportunity to be involved. This ensures that consideration of traffic problems on the study street do not result in the exacerbation of traffic problems on adjacent neighborhood streets and does not eclipse the needs and quality of the neighborhood as a whole. This includes a consideration of the impacts of traffic diversion onto collector and arterial streets.

Step 1. Apply to Participate

NTSP projects can be requested by neighborhood associations or groups, Common Council members representing a neighborhood, neighborhood business associations or individuals from the neighborhood. It should be noted that although individuals are eligible to apply they are encouraged to work with or form a neighborhood association. Requests for participation in NTSP will be made through the BPSC (application form will be provided by and returned to City Engineering staff).

The petition from a problem street or area must describe the problem (i.e., speeding, inappropriate cut-through, ignoring stop signs, etc.) and request some infrastructure change to reduce the problem. The specific form of the infrastructure change may not be known at this point. The petition must also include signatures from at least 51% of the affected street or area households or businesses. This must include any other street that must use the problem street as its primary access (for example, a dead end street or cul-de-sac off the problem street). Each household or business is entitled to one signature.

Finally, any Common Council member must sign the petition as a sponsor.

Step 2. Engineering Staff Review and Preliminary Data Collection

City Engineering staff will collect preliminary information about current conditions. This will include location, description of the problem and may include preliminary collection of traffic accident data, bicycle volume, pedestrian activity, traffic speed and through traffic. The Engineering Department will verify the percentage of households and businesses on the petition and if the percentage is sufficient, they shall notify the affected safety and emergency services of the initiative. The affected safety and emergency services shall include, but not be limited to, the City Police and Fire Departments and the local ambulance service. This information will be relayed to the BPSC for consideration to decide whether the request will be prioritized for inclusion in the NTSP. Requests are also reviewed for possible solutions. If the preliminary review shows that a hazard to the public exists, the City may address the problem separately from the NTSP.

Step 3. BPSC Review of Engineering Studies and Petitions

The BPSC will review the petition submitted as well as the preliminary data collected by the Engineering Department. At this point, the BPSC will either validate or reject the petition. They will also prioritize the petition with respect to other petitions and available resources within the current funding cycle (detailed in Appendix B). Petition validation is a commitment to try to do something about the problem.

Petitions with the highest priority ranking will continue to the next step.

Step 4. Public Meeting

The BPSC will send notices to all households and businesses within a defined project area to provide background information about the proposed project. The project area depends on the specific project, but

generally includes all properties on the project street, on cross streets up to the next parallel local street (or up to 300 feet from the project street) and on any other street that must use the project street as its primary access. For neighborhood collector streets, the next parallel local street (if one exists within 500 feet of the problem street) will also be included in the notification area. Representatives of the emergency service providers will also receive notification of the meeting. This notice will include an invitation to participate in a public meeting to help exchange ideas, address concerns and discuss possible traffic safety alternatives.

In addition to considering traffic calming and traffic control devices, plans developed in the NTSP will also consider the positive effects of education and enforcement.

Step 5. Preparation of Alternative Designs and Selection of Proposed Plan

The Engineering Department and the BPSC will hold an informal work session to prepare alternatives that address the neighborhood problem. The neighborhood is welcome to participate in this workshop to provide input.

The BPSC will assess the problems and needs of the neighborhood and propose solutions based on citizen input and sound engineering principles. Possible solutions and their impacts will be evaluated with consideration given to:

- Estimated costs vs. potential gain
- Effectiveness
- Pedestrian, bicycle and transit access
- Community wide benefit to bicycles and pedestrians
- Overall public safety
- Positive and negative consequences of traffic division
- Emergency and service vehicle access

The BPSC will identify the preferred alternative and City staff shall prepare a ballot for neighborhood approval.

If it is determined from both the public meeting and an informal work session of the BPSC that traffic safety techniques other than traffic calming devices are the preferred alternative, the proposal may not need to proceed through the additional steps as designated in the NTSP. The City Engineering Department will continue to work with the neighborhood on alternative neighborhood traffic safety techniques.

Step 6. Project Ballot

Local Service Streets:

All of the properties on the project street and on any other street that must use the project street as their primary access are sent notification that a proposed alternative has been selected. This notification will consist of a description of the proposal as well as a confidential mail ballot asking if they are in support of the project. Each household and business is entitled to one response.

To forward a project to Common Council for action, a majority of the eligible households and businesses must respond favorably by ballot. If over 50% of all eligible ballots respond in favor of the project, then it will be forwarded to the Common Council. If, however, less than 50% of all eligible ballots respond in favor of the project, but at least 60% of those returned ballots are in favor of the project, then a second

ballot shall be mailed to those addresses that did not respond to the first ballot. Ballots will be tallied for a period of four weeks from the time of distribution; ballots postmarked after the expiration date of the four-week period will not be tallied.

Neighborhood Collector Streets:

All of the properties on the project street, on cross streets up to the next parallel street (or up to 300 feet from the project street) and on any other street that must use the project street as their primary access are sent notification that a proposed alternative has been selected. This notification will consist of a description of the proposal as well as a confidential mail ballot asking if they are in support of the project. Each household and business is entitled to one response.

To forward a project to Common Council for action, a majority of the eligible households and businesses must respond favorably by ballot. If over 50% of all eligible ballots respond in favor of the project, then it will be forwarded to the Common Council. If, however, less than 50% of all eligible ballots respond in favor of the project, but at least 60% of those returned ballots are in favor of the project, then a second ballot shall be mailed to those addresses that did not respond to the first ballot. Ballots will be tallied for a period of four weeks from the time of distribution; ballots postmarked after the expiration date of the four-week period will not be tallied.

Step 7. Testing and Evaluation of Traffic Calming Device

A test of the traffic calming plan may occasionally be required to determine its effectiveness. If the Engineering Department and BPSC determine that testing is necessary, temporary traffic calming devices shall be installed for a period of at least one month.

Following the test period, data will be collected to evaluate how well the test device has performed in terms of the previously defined problems and objectives. The evaluation includes the project street and other streets impacted by the project and is based on before-and-after speeds and volumes, impacts on emergency and service vehicles or commercial uses, and other evaluation criteria determined by the BPSC. If the evaluation criteria are not met to the satisfaction of the BPSC and City Engineering staff, the traffic plan may be modified and additional testing conducted. If the test installation does not meet the project objectives, the request will need to go back to Step 5 for additional alternatives and neighborhood ballot.

If the City Engineer finds that an unforeseen hazard exists, the test may at any time be revised or discontinued. City Engineering staff will inform the BPSC and the neighborhood of any actions taken to modify or terminate a test.

When testing of traffic calming or traffic control devices is not possible or necessary, the plan will proceed to Step 8.

Step 8. Common Council Action

Based on the project evaluation and a positive ballot, City staff members prepare a report and recommendations for the Bicycle and Pedestrian Safety Commission to forward to the Common Council for action. The report outlines the process followed, includes the project findings, and states the reasons for the recommendations.

If a project does not obtain the required ballot approval, it is not forwarded to the Common Council.

Step 9. Board of Public Works

After the project has been approved by the Common Council, detailed project plans, specifications and estimates will be prepared by City Engineering staff.

Before the project(s) can be constructed by the City's Street Department or let for bidding by construction companies, the project plans and construction fund expenditures must be approved by the Board of Public Works.

If a project is not approved, it will be referred back to the Engineering staff to address the Board's concerns.

Step 10. Construct Permanent Traffic Calming Device(s)

Construction is administered by the City and is generally completed during the following construction season.

Step 11. Maintenance

The City of Bloomington Engineering and Street Departments are responsible for the construction and maintenance of any traffic calming device implemented as part of this program. The Traffic Division is responsible for any traffic signing and pavement marking or delineation. Any trees planted within the right-of-way are the responsibility of the Parks and Recreation Department and any landscaping (not including trees) is the responsibility of the neighborhood association.

Step 12. Follow-up Evaluation

Within six months to one year after construction of an NTSP project, the City may conduct a follow-up evaluation to determine if the project's goals and objectives continue to be met. This evaluation may entail traffic studies of volumes, speeds and accidents as well as public opinion surveys.

APPENDIX A

VISION AND MISSION STATEMENT OF THE CITY OF BLOOMINGTON

THE MISSION OF CITY GOVERNMENT

- **QUALITY DELIVERY OF BASIC SERVICES AND PROGRAMS**

Do well those things that municipal government is uniquely expected and able to do - public safety, streets and roads, parks, etc.

- **CONTINUOUS GOVERNMENT IMPROVEMENT**

Develop and implement the management and information systems that allow the determination and evaluation of the best practices and methods for the delivery of services and programs.

- **PRESERVE AND ENHANCE COMMUNITY CHARACTER**

Maintain, develop and implement policies that foster those aspects of our community spirit and our civic life that, combined, constitute the cherished quality of life that is uniquely Bloomington's.

A VISION OF COMMUNITY

- | | |
|---|---|
| • A SAFE AND CIVIL CITY | NEIGHBORHOODS AS VILLAGES,
CONNECTED TO EACH OTHER AND |
| • A PLACE OF BEAUTY | COMMUNITY |
| • A CAPITAL OF KNOWLEDGE | THE FRIENDLIEST TOWN AROUND |
| • A CULTURAL OASIS | DIFFERENT FOLKS, DIFFERENT STROKES |
| • BIG CITY ADVANTAGES, SMALL
TOWN FEEL | |

CIVIC VALUES

- | | |
|--|--|
| • ABOVE ALL, NO VIOLENCE | DISCOURSE SHOULD BE CIVIL |
| • KIDS FIRST | AESTHETICS MATTER |
| • COMPASSION FOR CITIZENS IN
CRISIS | HEARTS AND SOULS NEED
NOURISHED TOO |
| • CHARACTER THROUGH DIVERSITY | |

APPENDIX B

POINT ASSIGNMENT FOR RANKING NTSP REQUESTS

		Point assigned
1) Percent of vehicles traveling over the posted speed limit		
low = 33%		1
medium = 33 - 67%		2
high = 68+%		3
A) Cut through traffic versus within (intra?) neighborhood speeding:		
Further study?	Yes/no	
2) Average daily traffic volumes		
Local Service Streets	Neighborhood Collector Streets	
low = 1 - 599	low = 500 - 1,499	1
medium = 600 - 1,499	medium = 1,500 - 3,499	2
high = 1,500+	high = 3,500+	3
3) Number of accidents along proposed calming area in 3 year period		
low = 1 - 2		1
medium = 3 - 4		2
high = 5+		3
		Yes No
4) Creation of pedestrian and bicycle networks		
school walk route		1 0
school on proposed traffic calming street	1	0
designated bicycle route		1 0
route in or to pedestrian area (e.g., park, shopping, etc.)		1 0
proposed calming street has NO sidewalks		1 0
proposed calming area has NO bike lanes		1 0
within walking distance to transit		1 0
5) Scheduled road construction/reconstruction in proposed calming area		2 0

TOTAL POINTS:

Priority rank:

Comments and recommendations:

Calculated points are summed and competing projects' point totals are compared. The project with the greater point total moves ahead of those projects with less total points.

APPENDIX C

TRAFFIC CALMING DEVICES

Traffic calming relies upon physical changes to streets to slow motor vehicles or to reduce traffic volumes. These changes are designed to affect drivers' perceptions of the street and to influence driver behavior in a manner that is self-enforcing. Unlike traditional methods of traffic management, traffic calming does not rely primarily upon the threat of police enforcement for its effectiveness. Items which may be considered as traffic calming devices and which may be applied in a NTSP project are shown in Table 2.

1. Street and Lane Narrowing

Motorists tend to drive at speeds they consider safe and reasonable and tend to drive more slowly on narrower roads and traffic lanes than wider ones. Reducing road widths by widening boulevards or sidewalks intermittently or introducing medians can reduce traffic speeds. The judicious placement of parking (protected by curbs and made more visible by landscaping) can achieve the same effect. Road narrowing has the added advantage of reducing the expanse of road to be crossed by pedestrians, thus reducing pedestrian crossing time.

Other criteria to be applied and considered prior to street narrowing include:

- **Bicycle Accommodations:** On local streets designated as a bike route or serving a significant volume of bicycle traffic, a sufficiently wide bicycle lane should be provided through the narrowed area. Where traffic and/or bicycle volumes are sufficiently low, exclusive bicycle lanes may not be required.
- **Snow Removal:** The pavement width of streets shall not be narrowed to a point where it becomes an impediment to snow removal.
- **Parking Restrictions:** In most cases on local access streets, street narrowing will require the prohibition of parking at all times along the street curb the full length of the *narrowed section* plus 20 feet.
- **Landscaping:** Median landscaping can be selected by neighborhood associations from an approved landscaping materials list provided by the City. Landscaping will be provided and installed by the City and will be maintained by the neighborhood association or landscape volunteer. If the landscaping is not maintained, the median will be topped with concrete or asphalt pavement.
- **Median Width/Lane Width:** Where medians are used to narrow streets, the medians shall not be constructed at less than four feet in width. Travel lanes shall not be narrowed to a width less than nine feet, exclusive of gutter. Bicycle lanes where required shall be four feet wide exclusive of gutter, unless the gutter is poured integral to the bicycle lane, in which case the bicycle lane will be five feet wide. If parking is allowed, the parking and bicycle lane combination shall be a minimum of 13 feet.

2. Bicycle Lanes

Lane widths available to motorists can be reduced on some streets by the installation of bicycle lanes, either next to the curb (preventing stopping or parking by motor vehicles) or adjacent to parking. The space needed for bicycle lanes introduced on an existing street may reduce the width or number of general traffic lanes or the amount of parking. Bicycle lanes shall be constructed to the standard specifications of the Bloomington Public Works Department

3. Raised Street Sections or Speed Humps

Raised street sections or speed humps can reduce vehicle speeds on local streets. The hump is a raised area, no greater than 3 inches high, extending transversely across the street. For local streets, speed humps typically are constructed with a longitudinal length of 12 feet. If speed humps are determined to be appropriate for neighborhood collector streets, they shall be constructed with a longitudinal length of 22 feet. These longer speed humps may also be considered on local service streets that serve as primary emergency response routes.

Other criteria to be applied prior to installation of speed humps include:

- **Signing/Marking:** Speed humps are required to be signed with a combination of signs and pavement marking to warn motorists and bicyclists of their presence.
- **Traffic Safety and Diversion:** Any use of speed humps must take into consideration the impact the installation will have on long-wheel-based vehicles (fire apparatus, ambulances, snow plows and garbage trucks) and the potential to divert traffic to other adjacent streets. Speed humps should only be installed to address documented safety problems or traffic concerns supported by traffic engineering studies.
- **Street Width:** Speed humps should be used on streets with no more than two travel lanes and less than or equal to 40 feet in width. In addition, the pavement should have good surface and drainage qualities.
- **Street Grade:** Speed humps should only be considered on streets with grades of 8% or less approaching the hump.
- **Street Alignment:** Speed humps should not be placed within severe horizontal or vertical curves that might result in substantial horizontal or vertical forces on a vehicle traversing the hump. Humps should be avoided within horizontal curves of less than 300 feet centerline radius and on vertical curves with less than the minimum safe stopping sight distance. If possible, humps should be located on tangent rather than curve sections.
- **Sight Distance:** Speed humps should generally be installed only where the minimum safe stopping sight distance (as defined in AASHTO's *A Policy on Geometric Design of Streets*) can be provided.
- **Traffic Speeds:** Speed humps should generally be installed only on streets where the posted or prima facie speed limit is 30 mph or less. Speed humps should be carefully considered on streets where the 85th percentile speed is in excess of 40 mph.
- **Traffic Volumes:** Speed humps should typically be installed only on streets with 3,000 vehicles per day or less. If considered for streets with higher volume, their use should receive special evaluation.
- **Emergency Vehicle Access:** Speed humps should not be installed on streets that are defined or used as primary emergency vehicle access routes. If humps are considered on these routes, special care must be taken to ensure reasonable access is provided.
- **Transit Routes:** Speed humps should generally not be installed along streets with established transit routes. If humps are installed on transit routes, their design should consider the special operational characteristics of these vehicles.

4. Full or Partial Road Closures (Semi-Diverter/Diverters/Cul-de-sac)

Roads can be closed to motor vehicles at intersections, preventing through movement and requiring access to be gained from other streets. Closure should be undertaken in such a way as to avoid simple displacement of traffic to adjacent residential streets. It will usually be possible and desirable to retain pedestrian and bicycle access.

- Partial intersection closures can be achieved by narrowing a street to one lane at an intersection and instituting an entry restriction. Another technique is to introduce a “diagonal diverter” or barrier diagonally across an intersection which forces traffic off a favored short-cut. Gaps can be left to allow access by pedestrians and bicyclists.
- Partial Closures: Partial roadway closures at intersections will require consideration of pedestrian and bicycle access and lane width requirements similar to those defined under Street and Lane Narrowing.

5. Chicanes

Chicanes are a form of curb extension which alternate from one side of the street to the other. The road is in effect narrowed first from one side then the other and finally from the first side again in relatively short succession. Chicanes break up the typically long sight lines along streets and thus combine physical and psychological techniques to reduce speeds.

- Lane Width: Where chicanes are used, the travel lanes shall not be narrowed to a width less than nine feet, exclusive of gutter. Bicycle lanes where required shall be four feet wide exclusive of gutter, unless the gutter is poured integral to the bicycle lane, in which case the bicycle lane will be five feet wide.
- Snow Removal: Chicanes shall be designed to minimize the accumulation of snow piles and trash in the gutter interface between existing curb and gutter and chicane.
- Landscaping: Landscaping will typically consist of grass. Other landscaping may be selected from an approved landscaping list provided by the City. Landscaping may be provided and installed by the City and will be maintained by the Neighborhood Association or landscaping volunteer. Landscaping will not be approved which will obstruct the driver’s vision of approaching traffic, pedestrians or bicyclists.

6. Traffic Circles

Traffic circles are circles of varying diameter formed by curbs. Motorists must drive around the circle, or in the case of longer vehicles, drivers may drive slowly onto and over a mountable concrete curb forming the circle. Traffic circles reduce motor vehicle speeds through the intersections, depending on current intersection controls in place.

Other criteria to be applied and considered prior to installation include:

- Design Considerations: For each intersection the size of the circle will vary depending on the circumstances for that specific intersection. In general, the size of the circle will be determined by the geometry of the intersection.
- Where intersecting streets differ significantly in width, it may be more appropriate to design an

elongated "circle" using half circles with tangent sections between them. Smaller circles will be constructed on a case-by-case basis. Normally the circle will be located as close to the middle of the intersection as practical. Under special circumstances, such as being on a Fire Department response route, bus route or due to snow removal accommodations, the size and/or location of the circle will be adjusted to more appropriately meet these special circumstances.

- Design Considerations for "T" Intersections: For "T" type intersections, all of the above design considerations apply. In addition, curb extensions (or curb bulbs) may be included along the top of the "T" at the entrance and exit to the intersection.
- Signage: Appropriate signage for traffic circles will be determined by the City Engineer and may vary based on the location of the circle.
- Channelization: Where curbs do not exist on the corner radii, painted barrier lines, defining the corners, should be installed.

Yellow retro-reflective lane line markers shall be placed on top of the circle at its outer edge.

- Parking Removal: Normally, parking will not be prohibited in the vicinity of the circle beyond that which is prohibited by the City of Bloomington, ie, "within the intersection" or "within 20 feet of a crosswalk area". However, where special circumstances dictate, such as where the circle is on a response route for the Fire Department or to accommodate snow removal, or in an area where there is an unusually high use by trucks, additional parking may be prohibited as needed.
- Sign Removal: At intersections where circles are to be installed, any previous right-of-way controls may be removed at the time of circle construction completion. However, where special circumstances dictate, the existing traffic control may remain in place or be otherwise modified at the direction of the City Engineer.
- Landscaping: Landscaping will be selected by the neighborhood association or the City Parks and Recreation Department from an approved landscaping materials list provided by the City. Landscaping will be provided and installed by the City and will be maintained by the neighborhood association. If the landscaping is not maintained, the traffic circle will be topped with concrete or asphalt pavement.

Volunteer Required: Plant material will only be installed at traffic circles where a local resident or neighborhood association has volunteered to maintain the plant material. This maintenance will include watering, weeding and litter pick-up, as needed. All volunteers will be provided with information on maintenance of the plant material and common problems.

Points at which volunteers will be required: During initial contact, the person or neighborhood association requesting participation in the NTSP will be informed of the need for a volunteer for landscaping. In the notice of the neighborhood meeting, before construction, all residents will be informed of the need for a maintenance volunteer. This will be reiterated at the meeting if no one has volunteered. If no one has volunteered by the time that the circle is constructed, a special letter will be distributed to all residents informing them of the need for a volunteer (Figure 4). A final notice to residents will be included in the cover letter for the "after" survey of the residents.

Plant Replacement: Where the Public Works Department has had installed plant material in a traffic circle, the Department will replace any plant material which is damaged by traffic or vandalism or which dies due to planting, for a period of one year after the initial planting. If such damage is a

persistent problem, the Department may decide to cover the circle with a concrete or asphalt topping rather than continue to replace plant materials.

Stop Signs

In some instances stop signs can be used as an effective traffic management and safety device. However, stop signs are not used as a traffic calming device within the NTSP.

Stop signs are used to assign right-of-way at an intersection. They are installed at intersections where an accident problem is identified, where unremovable visibility restrictions exist (such as buildings or topography), and/or where volumes are high enough that the normal right-of-way rule is potentially hazardous.

Stop signs are generally not installed to divert traffic or reduce speeding. Studies from other jurisdictions show that such use of stop signs seldom has the desired effect. In fact, the use of stop signs solely to regulate speed typically causes negative traffic safety impacts (non-compliance with the signs and increased accidents as well as mid-block speeding).

NEIGHBORHOOD TRAFFIC SAFETY TECHNIQUES								
DEVICES	SAFETY	SPEED REDUCTION	PEDESTRIAN BICYCLISTS ACCESS	TRAFFIC DIVERSION	NOISE	EXHAUST EMISSIONS	EMERGENCY SERVICES	ACCEPTABLE FOR TRAFFIC MANAGEMENT
Police Enforcement	Improvement	Depends on Amount	Possible Improvement	No Effect	No Effect	No Effect	No Effect	Yes
Speed Humps	Unknown	Yes	Mixed Results	Possible	Increase	Small Increase	Possible Problem	Yes
Education	Possible Improvement	Possible	Possible Improvement	N.A.	N.A.	N.A.	No Effect	Yes
Entrance Treatments	Possible Improvement	Unlikely	Possible Improvement	Mixed Results	No Effect	No Effect	Possible Problem	Yes
Curb Extensions	Improve Ped. Crossing	Unlikely	Yes	No Effect	No Effect	No Effect	Possible Problem	Yes
Partial diverters/ Diverters/Cul-de-Sec	Possible Improvement	Possible	Possible	Yes	Possible Reduction	No Effect	Possible Problem	Possible
Chicanes	Possible Improvement	Possible	Possible	Possible	No Effect	Small Increase	Possible Problem	Yes
Traffic Circles	Improved	Yes	Possible	Possible	No Effect	No Effect	Possible Problem	Yes
One-way Streets	Possible Improvement	No	Mixed Results	Possible	No Effect	No Effect	Possible Problem	Yes
Median Barrier	Possible Improvement	No	Mixed Results	Possible	No Effect	No Effect	Possible Problem	Yes
Improve Arterial Streets	Possible Improvement	Unlikely	Possible Improvement	Possible Improvement	Possible Improvement	Possible Decrease	No Effect	Limited
Traffic Control Devices: e.g. Prohibitory Signing	Possible Improvement	Unlikely	Possible Improvement	Yes	Possible Improvement	No Effect	No Effect	Possible

Appendix D